

ABSTRACT

The invention consists of a structural algorithm, processes, apparatuses and systems for evaluating, matching and fostering individuals' behavioral capabilities to the requirements for successful human performance in any role and situation. Traditional approaches to such evaluation, matching and fostering are based on subjective judgment and scores on tests statistically correlated with desired behavior with inherent problems of reliability, relevancy to real-life requirements, omissions of essential capabilities usefulness in indicating paths to further individual attainment, and unfairness of resultant decisions. The invention uses a new algorithm to construct a profile of required ability levels underlying the performance of recognized successful individuals in specific situations. Other individuals are then evaluated only in terms of discrepancies between required ability levels and the levels indicated by their performance of indicators of attainment in each of the required dimensions of ability. The method of the invention assures that only data with established validity are processed and, therefore, that the calculated differences between required and attained levels of various behavioral capabilities are valid predictors of successful and unsuccessful individual performance in any role and situation. Required abilities are selected for each comparison in seven linked types of behavior, each with its own method of measurement. As the measurement methods of the invention are used only to construct comparison gauges of a specific requirement and an individual attainment, there is no need for inferring absolute value or generalizable meaning to any ability measurement, as is always of concern with traditional capability measurements. The invention employs a novel algorithm and method to construct multidimensional gauges of the necessary and sufficient behavioral abilities, novel processes to identify individual's attained levels of the required abilities and to match individual's abilities with role-situation requirements, novel processes to evaluate or select intervention strategies for furthering individual's attainment of required abilities and a novel algorithm to identify the level of stress induced by

computer presentations. Apparatuses provide data on tension and brain waves to improve the definition and discrimination of behavioral abilities. Systems apply these methods and apparatuses to individual's capability evaluation, matching, and attainment and to the management of operations. Systems also include provisions

5 to evaluate the effectiveness of interventions targeted at abilities improvement, to assure the correct identify of individuals linked with system services, to improve the accuracy of matching and to network system operations worldwide.

Applications of the invention are anticipated in human resource management, training, education, counseling, therapy, medical, self-help and other settings.

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